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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,135	07/12/2005	Steven G E Aerts	NL 030052	9781
65913	7550	12/19/2008	EXAMINER	
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			NEWLIN, TIMOTHY R	
			ART UNIT	PAPER NUMBER
			2424	
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			12/19/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary

Application No.

10/542,135

Applicant(s)

AERTS, STEVEN G E

Examiner

Timothy R. Newlin

Art Unit

2424

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 6/11/2008 have been fully considered but they are not persuasive. Traversing the §102 rejections, Applicant argues that Boyce does not disclose 1) *caching* (as opposed to storing) video segments, and 2) caching *multiple* segments.

Regarding the first point, Examiner notes that the amendment of claim 1 does narrow its scope, because according to applicant caching is a particular type of storage, i.e. temporary rather than permanent. However, the amendment does not distinguish over Boyce, which stores I-frames in a temporary fashion using buffers 19, 21, and 23. **[Figs. 1A-B, col. 7, 31-35; cols. 8-9, 66-4; col. 10, 1-5]**. This is equivalent to caching, and whether the I-frames are subsequently permanently stored on videotape is not dispositive.

Applicant's second argument fails for two reasons. First, claim 1 does not clearly limit the invention to caching multiple I-frames *simultaneously*, as Applicant appears to argue. Boyce anticipates the limitation as written (plural "segments"), because he does in fact buffer a plurality of I-frames, even if it is done serially rather than in parallel. Furthermore, Boyce discloses buffering not only independent I-frames but "bitstreams of low resolution I-frames," **[col. 10, 1-5]** which would meet the limitation of simultaneous caching were it added to claim 1.

Addressing the §103 rejections, Applicant submits that Boyce and Logan are not combinable because there is no reason for Boyce to incorporate anti-shock buffering.

Examiner initially notes that claims 7 and 17 do not actually claim an explicit anti-shock buffering function, but merely recite that the data must be "*suitable for use* as anti-shock buffer data" (emphasis added). Using the buffers taught by Boyce, frames are acquired and stored in advance of their display time. The data is available to be played back continuously even when new frames cannot be acquired (e.g., due to physical shock). Thus, the data is suitable for use in an "anti-shock" function. Boyce therefore discloses all the necessary elements necessary for an anti-shock function. Logan merely provides evidence that using buffered data to minimize playback interruption was recognized by those skilled in the art at the time of invention. With this knowledge, a skilled person could predictably use the buffering functions of Boyce as an anti-shock mechanism. Boyce and Logan are combinable on that basis and therefore the §103 rejections stand.

Evidence of teachings previously addressed under Official Notice is provided below.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 and 11-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Boyce et al., US 5,717,816.

3. Regarding claims 1 and 11, Boyce discloses a method of caching a part of digital content data from a content source (202), comprising the step of:

acquiring the digital content data from the content source (202) **[col. 7, 22-22 and 36-39;]**, characterized in that

said part of the digital content data comprises interleaved segments (130; 131) of the acquired digital content data **[col. 1, col. 7, 57-63]**, and

said interleaved segments (130; 131) of the acquired digital content data are stored in a first memory (203), thereby allowing for fast access to said part of the digital content data **[Figs. 1A-B, col. 7, 31-35; cols. 8-9, 66-4; col. 10, 1-5]**.

4. Regarding claims 2 and 12, Boyce discloses a method wherein the digital content data are digital audio and/or video data **[col. 5, 25-27]**.

5. Regarding claims 3 and 13, Boyce discloses a method characterized in that the method further comprises playing back the digital content data stored on the content source (202) **[the term "playing back" in claim 3 is construed broadly to encompass either normal or "trick" playback, and is thus anticipated by either normal or trick play, both of which are disclosed by Boyce; see col. 6, 29-67 for a discussion including "normal playback"]**, and that the storing of said interleaved

segments (130; 131) takes place at or after replay **[TDPE 9 receives full rate bitstream and stores interleaved segments at the same time normal play takes place, col. 7, 17-67; col. 9, 41-55; col. 11, 48-53].**

6. Regarding claims 4 and 14, Boyce discloses a method characterized in that the storing of the interleaved segments (130; 131) depends on parameters, which at least take account for a probability of replay and/or an acquisition time **[segments are stored based on acquisition time, col. 9, 11-40] .**

7. Regarding claims 5 and 15, Boyce, discloses a method characterized in that the digital content data are video data in MPEG format and that the interleaved segments of the acquired digital content data are I-pictures **[col. 5, 25-35].**

8. Regarding claims 6 and 16, Boyce discloses a method characterized in that each of the interleaved segments (130; 131) of the acquired digital content data is a continuously acquired part of the digital content data from the content source (202) **[col. 7, 22-39].**

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyce as cited above in view of Logan, US 2004/0255330.

11. Regarding claims 7 and 17, Boyce does not teach the use of the buffers as an anti-shock mechanism. Logan discloses storing a contiguous first part of the digital content data in a second memory (204), which contiguous part (121) of the digital content data is suitable for use as anti-shock buffer data [para. 54]. It would have been obvious to one skilled in the art to combine Boyce with Logan in order to utilize separate buffers to prevent interruptions in playback caused by skipping or shock. Since Boyce already teaches simultaneous buffering [see Fig. 1B], it would have been clear that using a second normal-playback buffer would achieve that benefit. See Response to Arguments section above for further explanation of the §103 combination.

12. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyce as cited above in view of Logan, US 2004/0255330 and further in view of Kang, US 5,850,258.

13. Regarding claims 8 and 18, Boyce and Logan do not address the single memory chip. Knag teaches the incorporation two buffering memories on one circuit [**col. 5, 10-14**]. One of ordinary skill, given the multiple buffers disclosed by Boyce, one of ordinary skill would realize the advantage of consolidating buffers into a single circuit as taught by Kang in order to conserve space in the receiver and lower cost by eliminating redundant components.

14. Claims 9, 10, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyce as cited above in view of Lin, US 2003/0093801. Boyce does not explicitly describe the source of the incoming data stream. Lin teaches receiving data from a storage medium or remote source via a network [**Fig. 2, disk 105, network 103**]. It would have been obvious to one skilled in the art that the Boyce system could utilize existing storage or a network as an accessible source of video data.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy R. Newlin whose telephone number is (571) 270-3015. The examiner can normally be reached on M-F, 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/
Supervisory Patent Examiner, Art
Unit 2424

TRN

